

AMENDMENTS

In The Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1-10. (Canceled)

11. (Currently Amended) A dyeing device for dyeing a plastic lens, comprising:

a heating furnace comprising a frame section forming a space within the heating furnace
and a cooling mechanism within the heating furnace separate from the frame section in a position
corresponding to a portion of the lens within the frame section not requiring coloration;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom
surface of the frame section;

a lens-holding mechanism for holding the lens; and

a lens-moving mechanism for moving the lens-holding mechanism to insert all or a part
of the lens from the insertion port into an interior portion of the heating furnace.

12. (Canceled)

13. (Currently Amended) The dyeing device for dyeing a plastic lens of claim 11 ~~or~~ 12,
wherein the lens-moving mechanism further comprises a device for controlling the insertion
position of the lens into the interior portion of the furnace.

14. (Currently Amended) The dyeing device for dyeing a plastic lens of claim 11 ~~or~~ 12,
further comprising a device for controlling a temperature distribution within the heating section
so as to produce a half-dyed lens.

15. (Currently Amended) The dyeing device for dyeing a plastic lens of claim 11 ~~or~~ 12,
further comprising a device for controlling the heating of the lens so as to produce a variation in
coloration in the lens.

16. (Currently Amended) ~~The A~~ dyeing device for dyeing a plastic lens ~~of claim 11 or 12, comprising:~~

a heating furnace comprising a frame section forming a space within the heating furnace;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom surface of the frame section;

a lens-holding mechanism for holding the lens; and

a lens-moving mechanism for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace,

wherein the lens-moving mechanism is configured to move the lens in a vertical direction while the lens is in the heating section.

17. (Currently Amended) ~~The A~~ dyeing device for dyeing a plastic lens ~~of claim 11 or 12, further comprising:~~

a heating furnace comprising a frame section forming a space within the heating furnace;

a heating section provided within the frame section;

an openable insertion port for allowing insertion of the lens provided on or near a bottom surface of the frame section;

a lens-holding mechanism for holding the lens;

a lens-moving mechanism for moving the lens-holding mechanism to insert all or a part of the lens from the insertion port into an interior portion of the heating furnace; and

a device for setting a temperature distribution state within the heating furnace such that the temperature increases from the vicinity of the insertion port toward the inside of the frame section.

18. (New) The dyeing device for dyeing a plastic lens of claim 16, wherein the heating furnace further comprises a cooling mechanism in a position corresponding to a portion of the lens within the frame section not requiring coloration.

19. (New) The dyeing device for dyeing a plastic lens of claim 17, wherein the heating furnace further comprises a cooling mechanism in a position corresponding to a portion of the lens within the frame section not requiring coloration.